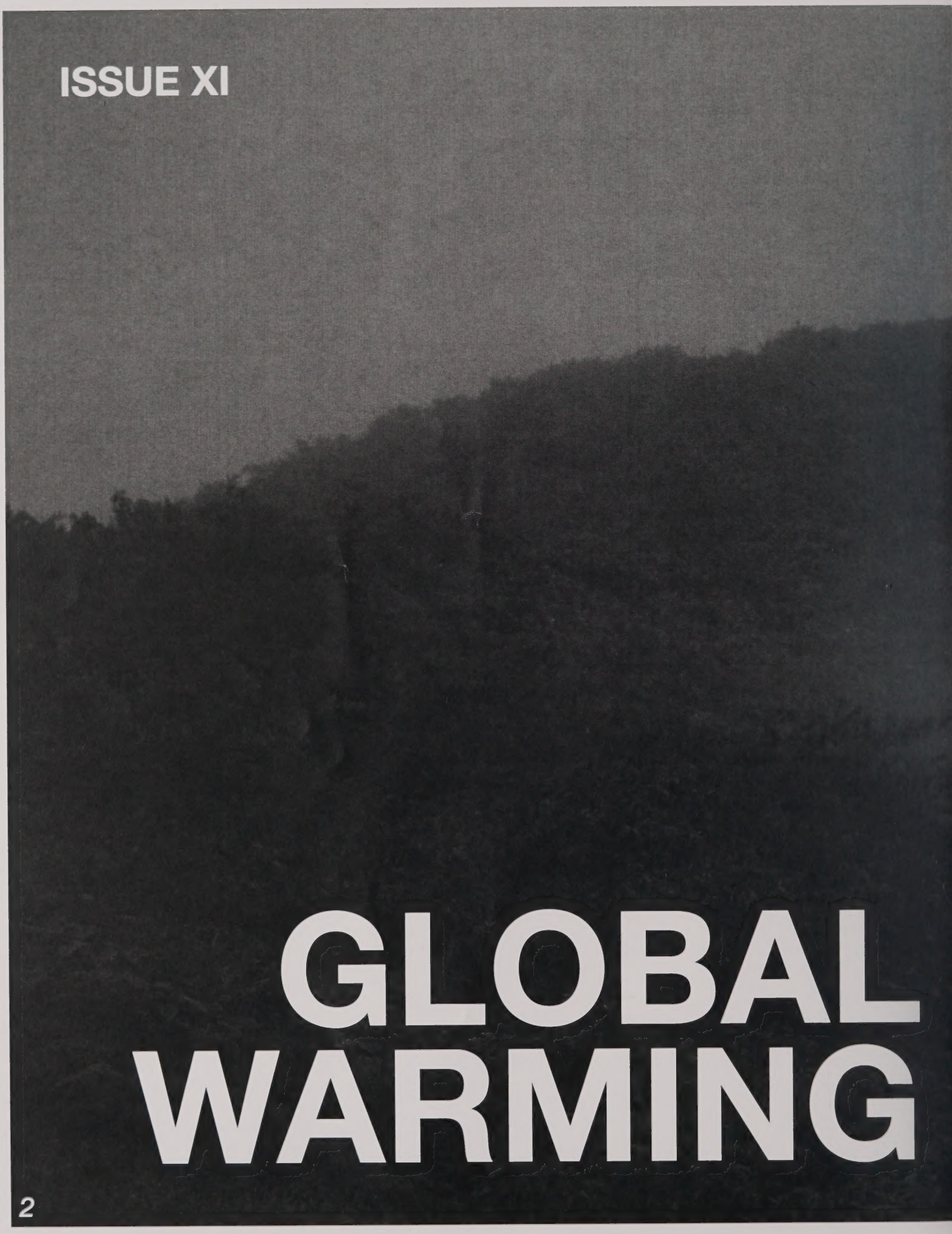
NEWS ROOM


ISSUE XI
GLOBAL
WARMING

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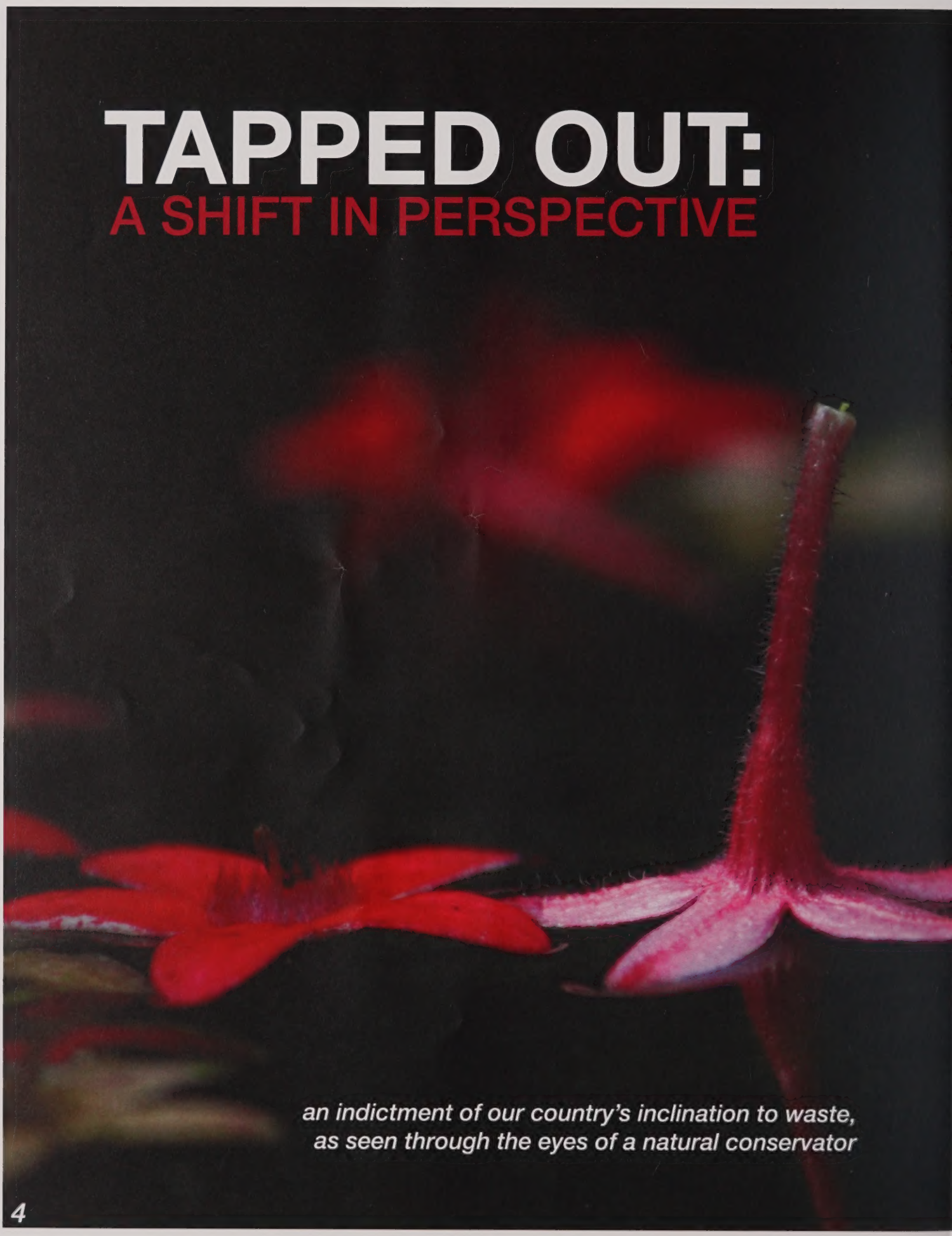
EDITORS-IN-CHIEF:
Stephanie Chang + Joe Ritchie
EDITORS:
Caroline Casey + Lena Mirisola + Billy Sears
DESIGN:
Liam Annis + Mike Boyle

Photo: illesha Khandelwal / Front Cover: Joe Ritchie / Back Cover: Liam Annis

TAPPED OUT:
A SHIFT IN PERSPECTIVE



an indictment of our country's inclination to waste,
as seen through the eyes of a natural conservator

It is not a part of our culture to save the world ourselves.

Who are we waiting for?

I grew up in the busiest city in India – Mumbai. Litter, pollution, dirty water, alarming crowds, widespread disease, food poisoning, insects in the produce, toxic fumes, unhygienic markets, poor garbage disposal, too many mosquitoes, smelly livestock – I've seen it all. You'd think that moving to the United States would have me reeling in awe, eyes wide at the progressive cleanliness and sustainable practices. You would be wrong.

There is one moment in particular that I can recall, when I really felt the enormity and disparity of the unconscious wastefulness that is America. And so that you can feel the impact too, let me give you some background on how drinking water is obtained in India. In an upper-middle class home in Mumbai, water is collected everyday in large vessels from the tap and set to boil until safe to drink. It is left to cool and then poured into either a clay pot with a tap, or several glass bottles. As technology has taken great leaps, some more urban households keep an electronic water filter that is turned on once a day to collect enough water for everyone to last the day. Some even more progressive homes have filters that can be turned on anytime to pour oneself a glass of clean water. In the rural areas outside of major cities like Mumbai, however, villagers must rely on local wells and aquifers, as well as rainwater harvesting; this requires a lot more physical labor and not to mention, health risks - we'll skip the details.

So, back to this moment. When I moved here, you would barely have believed my amazement at being able to turn on a tap, pour myself a glass of water and actually drink it without being afraid. It was a beautiful life, I could pour myself a glass without thinking about the bottle running out or filter taking its own sweet time to quench my thirst. But then came the horror, something I became aware of only after beginning the terrible task of being a grown up and cooking my own meals.

photo: illesha Khandelwal

Everyone knows the worst part about cooking - those dirty dishes afterwards. You gotta get your hands slimy with pungent lemon scented soap that never seems to wash off, and use a sponge that appears to be collecting more leftover food than its cleaning. It's a pain. As I turned on the tap and held my ramen-stained pot in the sink, I watched the water run over it smoothly, dislodging the stray noodle or two. And then with a speed that can only be attributed to DC's Flash, I turned off the tap in a panic. The realization? - This water I was using to wash my dishes was actually drinkable. Clean, sound tasting, hygienic, pathogen-free drinking water. And I was watching it run down the sink in no small amount.

It seemed - and still seems, as I try to get over this, a year and counting - absolutely insane to me that in America dishes are washed with water that can be safely consumed. So I will leave you with something to think about, with the questions I have spinning around in my head; Why didn't they have a separate tap with untreated water to waste on such tasks? What was the point in pouring resources into a treatment system if the water isn't meant for human consumption? How much could India have benefited from this treatment system to provide for the hundreds of thousands of citizens who have no access to clean water? Could these resources be channelled instead to a path that leads to us saving the world together? Could it save lives? Do dishes get better care in America than human beings get in India?

- illesha Khandelwal

photo: Lena Mirisola

YOU'RE GARBAGE

Ashleigh Tait examines the lasting effects your garbage will have on the planet.

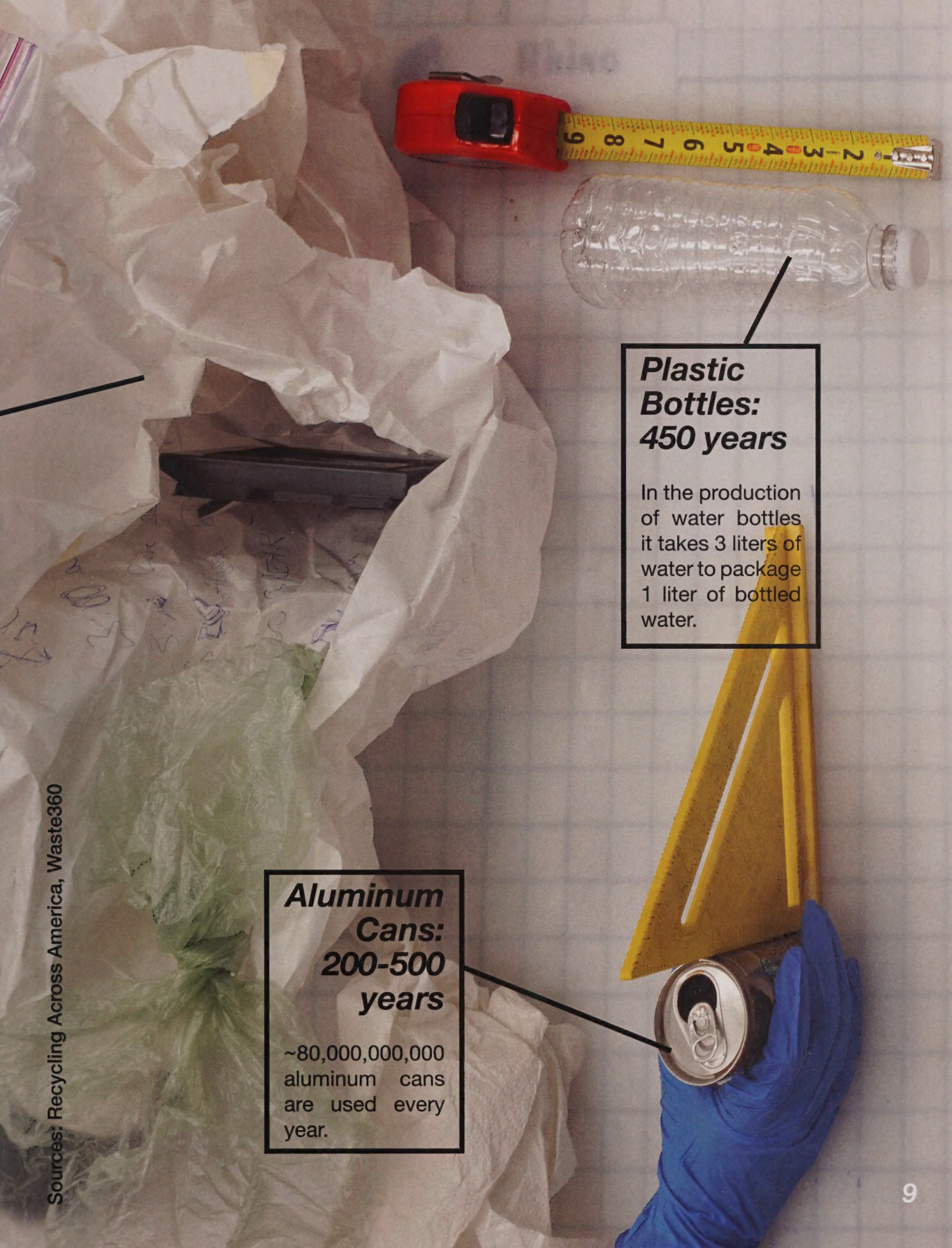
photo: Ashleigh Tait

Plastic Bags: 200-1000 years

~2 million plastic bags are used every minute around the world. An average American home uses 1,500 plastic a year.

Newspaper: 4-6 weeks

This amount of time is a lot better than other trash items. However, on average each person uses 57.88 pounds of newspaper each year, and in America only 32% of that is recycled, so it adds up.



Plastic Bottles: 450 years

In the production of water bottles it takes 3 liters of water to package 1 liter of bottled water.

Aluminum Cans: 200-500 years

~80,000,000,000 aluminum cans are used every year.

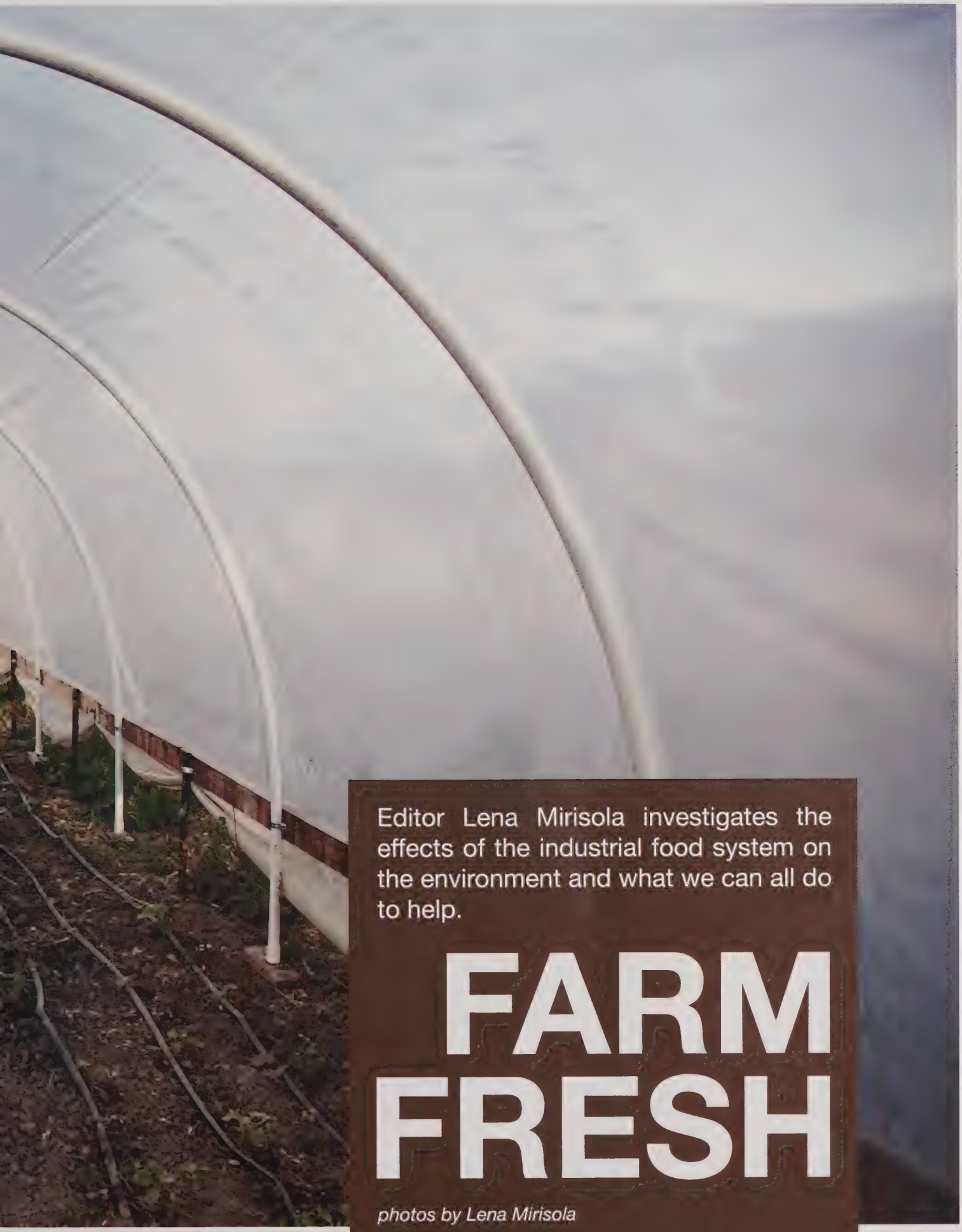
Sources: Recycling Across America, Waste360

GROWING UP GREEN

words and photos by Billy Sears

Growing up vegetarian, I never knew what it was like to try meat, but I never really wanted to, anyway. Kids at school would look at me with four heads when I told them I was a vegetarian, but I didn't care. I was perfectly content with my salad or PB&J at school. From a young age, I was exposed to the brutality and injustice of slaughtering animals and factory farming. I couldn't stand to see innocent animals killed when it's so easy to be meat free. There are so many substitutes for protein and nutrients, yet people are uneducated in this matter, so they believe meat is the only source of protein. Documentaries, such as Food Inc give an inside look at the cruelty and unsanitary world of factories. Is it that you don't know where your food comes from? Or do you just not care? Either way, I find it gross.

My sister and I have been vegetarian our whole lives, along with our mother, who has been a vegetarian for forty years. My mother became a vegetarian at the age of 15 when her pet pigs were slaughtered, and that's how she learned where meat came from. She also became conscious of how much grain it takes to feed animals and that there would be more food available if people were simply vegetarian. At my mother's house, we grow as many of our own vegetables as possible. They are organic and completely pesticide free. The vegetable scraps then can be used as compost to later put back into the garden to give the soil even more nutrients. Growing your own vegetables is very cost effective and a cheap, self-sufficient way of providing daily nutrients. If you are thinking about becoming vegetarian, research some of the healthy alternatives to meat to better understand your options. I have found it to be just as easy transitioning from the suburbs to the city and still being vegetarian. There are many restaurants now that cater to vegans and vegetarians such as Life Alive, My Thai Vegan Cafe and Veggie Galaxy, and you can still get fruits and vegetables at the local farmers market. Being vegetarian is a healthy alternative not only for your body, but the Earth as well.



Editor Lena Mirisola investigates the effects of the industrial food system on the environment and what we can all do to help.

FARM FRESH

photos by Lena Mirisola

Global warming - It's something we all shout about when the temperatures rise into the sixties in Boston in January. Or when two feet of snow is piled onto the streets in late March. In reality, it is the greatest humanitarian crisis of our time. Human abuse will be responsible for rising seas, raging storms, searing heat, ferocious fires, severe drought, and punishing floods. It threatens our health, communities, economy, and national security. We can no longer ignore the irreversible damage we are doing to the planet.

When most of us think about the root causes of global warming, we think of companies like VW, Honda, BP, and ExxonMobil. But the problem isn't just cars and oil spills, it's also a problem of cows and cornstalks. The largest single factor causing global warming may be the industrial food system. Powerful corporations like Archer Daniels Midland, Cargill, Dean Foods, Dow AgroSciences, Monsanto and Tyson share a majorly overlooked role in climate change. The corporate campaign to "patent nature" and control the world's food supply has been so successful that today, 85% of US corn is genetically engineered. On top of that, 95% of the meat, eggs, and dairy produced in America are from confined animal feeding operations, or CAFOs. To prevent the inevitable spread of disease from stress and overcrowding, animals are fed a steady diet of antibiotics. Those antibiotics pose a direct threat to the environment when they run off into our lakes, rivers, and drinking water.

Agriculture produces three major greenhouse gases - carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4). 60% of NO_2 in the atmosphere is from the use of chemical fertilizers. The world's best chance for averting climate change, and quickly, may actually be a vegetarian diet.

Between 18-51% of greenhouse gas emissions are from livestock and their byproducts. It accounts for at least 32 billion tons of carbon dioxide per year. Today, there are 65 billion livestock exhaling CO_2 each year, which is billions higher than in pre-industrial days. However, Earth's ability to keep carbon out of the atmosphere (photosynthesis) has sharply declined from mass deforestation. Meanwhile, we're adding more carbon to the air by buying fossil fuels, further overwhelming the system. The human population will grow by 35% in the next 40 years, while livestock numbers will double. This $100 billion market is taking the Earth down with it.

So what can be done? What can people, specifically us Bostonians, do to avoid contributing to global warming through the foods that we choose to consume? I visited the brand new Boston Public Market off of the Haymarket T stop. The Boston Public Market is the only year round, locally sourced market of its kind in the United States. Everything sold at the Market is produced in New England. I spoke with Annie, the retail manager of Siena Farms about alternatives to factory farmed food.

Lena: What are some ways people in Boston can avoid consuming food produced by factory farms?

Annie: There is a growing farmers market community, there are a number of year round markets available, definitely plenty of produce, local meat and seafood, there's also the Boston Public Market here year round which helps, and also local stores like our brick and mortar in the South End.

L: How does a farm like Siena Farms differ from factory farms?

A: It differs in so many ways - A farm like Siena Farms is different in that we're a small production growing a variety of produce. We're able to rotate our crops from year to year because we grow such a wide variety. By rotating our crops around, it keeps the soil a lot healthier. You don't need as many pesticides and chemicals to sustain the life of a factory farm where you're growing an insane amount of the same crop in the same plot from year to year which is very bad for the soil, and you have to add a lot [of chemicals] to do that in order to make that [land] viable. So with us, we're growing a healthy abundance of many different crops. We're doing it with a small crew of dedicated people who are paid fair wages.

L: And you guys use all your own seeds as well, they're not genetically modified -

A: Right - we get seeds from Johnny's in Maine mostly. It's like Christmas every time the seed catalog comes out. We use our own seeds from garlic and things like that, too.

L: So you don't have a huge parent company telling you how to grow your food.

A: Yeah, precisely.

L: What is your biggest concern about global warming? What are some things that you're doing on the farm to slow down or cope with the effects of global warming?

A: By bringing consumers New England produce year round, which is something that not a lot of farms do. During the winter, a lot of farms completely close up and don't offer anything after December. Since we opened our first store in the South End, we have been actively trying to show our customer base how to eat locally year round from New England, and that it's not just something you do during tomato season, it's something that is completely viable all year round. We've started doing more greens in our greenhouse, and we

source local farms for what they're doing in their greenhouses to fill up the selection and really have an abundance of vegetables so that you truly can come to either of our locations and get all of your groceries and not have to rely on grocery stores for those cheap items. We have grains, sauces, baked goods, vegetables, greens, roots, everything you need for a full dinner and it's all produced locally. It makes people realize how realistic it is to have this lifestyle all year round and not just in the summertime as a novelty, but as more of a lifestyle change.

L: What are you most proud of about what your farm does?

A: Oh gosh, what I'm proud of most... I'm really proud of our retail operations. What we do in retail and selling our vegetables is completely unique. [...] We started a city, brick and mortar - very unusual the way that works. There are markets that try to focus on [delivering] some local produce, but there are really no brick and mortar stores for 100% locally farmed goods. It's just a rare way for a farm to represent itself. A lot of farms do farmers markets, but those are temporary, seasonal, and aren't always conducive to people's work schedules. [...] In the city we're representing at least 75-100 different makers and other producers by bringing in other farms. On the shelves we have so many different friends represented who make maple syrup, pickles, etc. A lot of these places that we get the smaller items from are not represented in Boston, so it gives them a chance to live on their farms doing good and sell their stuff here. So I'm most proud of the model that we've developed. Hopefully it's something you see more and more in this city and other cities.

So how can we personally reduce greenhouse emissions? Eat local: less pesticides, humane conditions for animals, real working humans behind your food. Shop at farmers markets at Boston Public Market, Brigham Circle, Copley, Dewey Square, The South End, Allston, BU, and a dozen more. Cut down meat consumption to a few times a week. Be aware of the effects of the antibiotic filled meat you buy in the grocery store, and how much water it takes to produce the plastic bags you put your genetically modified corn in. It is possible to slow climate change - one step at a time.

Rising Seas

Photo by Will McAuliffe

Staff writer Will McAuliffe gets advice from environmentalist Barbara Burgess.

Living in Boston, one of the biggest concerns that come with the issue of global warming is the threat of rising seas. On the Eastern seaboard, ocean levels are rising at a rate three to four times faster than the global average. With many areas of Boston being built on former wetlands, such as East Boston and the Back Bay, the concern for the future is much greater. With this threat, it has come upon those currently in power, along with future generations, to take on the task of dealing with the rising seas.

I was able to talk to Barbara Burgess, the co-founder of the local organization Women Working For Oceans. Her group works to: "inform individuals about the challenges facing our oceans and inspiring action to ensure a healthy, sustainable blue planet for tomorrow." Burgess explained why the sea is rising, noting that the main factor is climate change and thermal expansion. "As the temperatures rise on the earth and especially in the sea, the sea expands and on it goes." National Geographic lists the melting of glaciers and polar ice caps along with ice loss from Greenland and West Antarctica as two more causes of sea rise.

Locally, the mayor and governor have both formed groups to start addressing these very real and concerning issues. MassPort has already invested millions and millions of dollars to mitigate the problem of sea level rise. There have been proposals to turn the Back Bay neighborhood into a series of canals similar to those in Venice, Italy.

A very big issue in low lying areas like Boston are storm surges. "The seas are rising slowly as the years go, but the big problem is you have high tides and if you have a big storm surge this is just what happened in super storm Sandy. High tide, big storm, big problem," says Burgess.

As the millennial generation, it has become our responsibility to look out for our Earth. Burgess urges younger generations to "Ride your bike, turn out the lights, take public transportation, or stop eating animal meat." She also says go and talk to school presidents and administrators, and urge them to plan ways to lower emissions on campus and to have conversations about aiding the cause at a wider level.

"My generation messed things up for your generation, and now we are all scrambling trying to fix it for you," she admitted. We can start by making small changes like conserving energy in our day-to-day lives or by becoming part of a movement. It is also important for us to be aware of the future, and one way we can do this is by actually paying attention to politics. In 2016, you should go out and vote for a candidate who is committed to change the catalysts behind global warming. Millennials may not have asked for this, but is has become our responsibility to make a change and save our planet for the future generations.

On the MIT campus, students worked with alumni to demonstrate what damage a hurricane storm surge could do to local hot spots like Cambridge and Back Bay. Flood heights were marked all over their campus by blue caution tape to show what a five foot storm surge would cause in Boston, factoring in the the overall temperature increase of the Earth. This demonstration jump started the debate on the MIT campus and identified the responsibilities they have to inevitably keep their space safe, or at least above water. Their goal is to have MIT put the $11 billion that are in fossil fuels into a more renewable option.
You can help by signing their petition on fossilfreemit.org

Photo by Liam Annis

COAL MINING AND AMERICAN EXPLOITATION

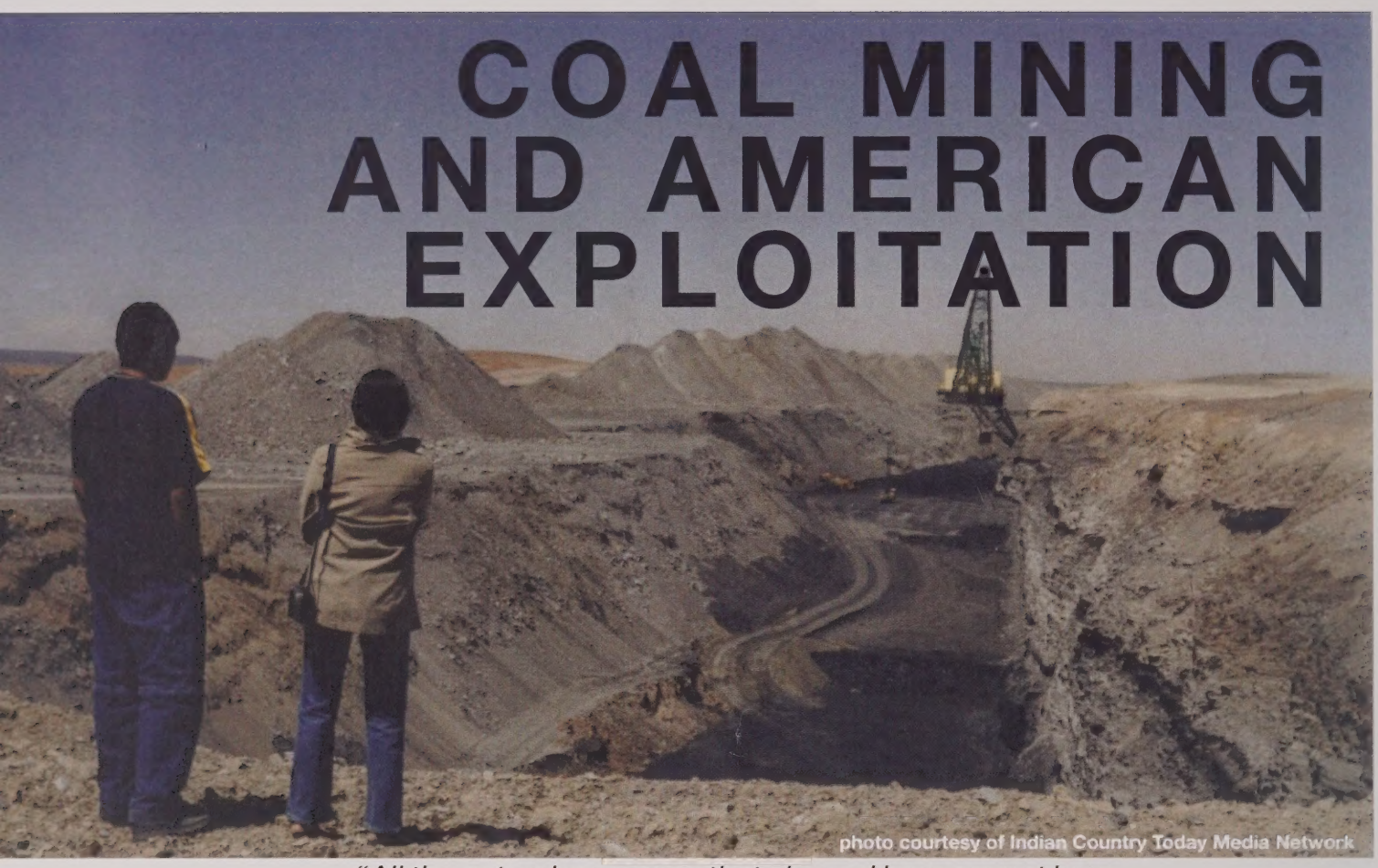
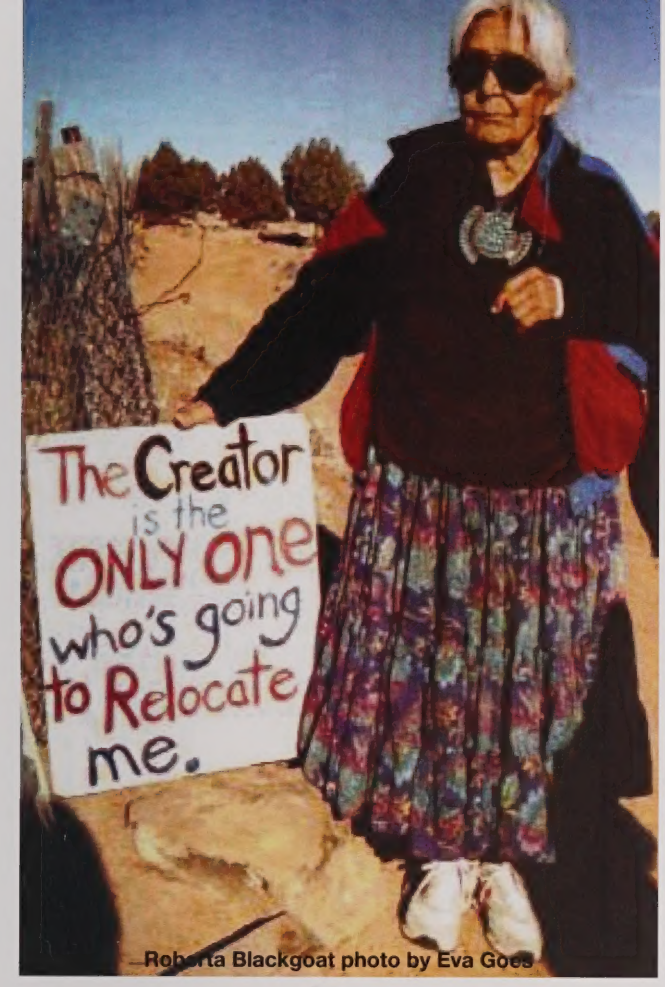


photo courtesy of Indian Country Today Media Network

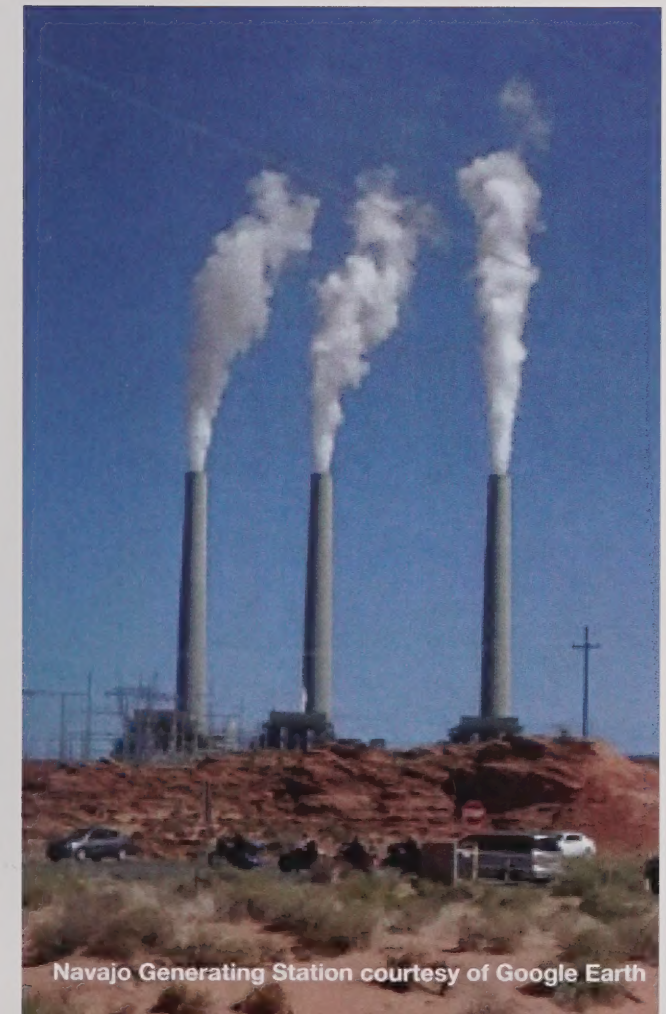
"All the natural resources that abound here are not here to be exploited but to be revered. All the things that we hold sacred have been co-modified. It's co-modification of the sacred. We are given no respect as human beings, as to our existence." - Roberta Blackgoat, an elder who has lived her whole life on Big Mountain (Black Mesa)

by Katie DeMonte

In northern Arizona, in the area of Black Mesa, Navajo and Hopi tribes live by the thousands since the 1500's. These people, whose cultures insist on respect for the land and animals, have been surviving off of an aquifer underground, mostly using it for agriculture. This water has a religious and cultural significance to these people. However, also buried in the hills of Black Mesa is twenty-one billion tons worth of coal reserves. This is where corruption sets in. In the 1950's, Utah lawyer, John Boyd, set out to allow this land to be accessed by major energy development. He approached these two tribes and after being rejected by the Navajo people, he created a new tribal council within the Hopi community. His first course of action was to introduce a bill to Congress so the Hopi people could sue the Navajos over use of their land. Boyd created a dispute out of nothing and the Hopi people were aggravated. They didn't trust him - this wasn't their way of life. Peabody Western Coal Company was interested in this land due to the promise of coal and the aquifer. They needed a supply of water for their slurry pipeline, which transported coal to provide electricity to cities in Arizona, Nevada, and California. The leases to the land and water were signed, though secretly, in 1966.



Roberta Blackgoat photo by Eva Goes


Navajo Generating Station courtesy of Google Earth

The effects of Peabody's influence on the land were obvious and in the three decades of operation, billions of gallons a year were pumped just to move coal. At an environmental hearing, Hopi citizen Marilyn Masayesva observes, "The water has become more valuable than the coal. The water is priceless. No amount of compensation can replace the source of life for the Hopi and Navajo people. It is absolutely immoral and irresponsible for the federal government to support a continuation of mining activities." Corporate America is no stranger to taking advantage of marginalized and indigenous people. Navajo and Hopi tribes lack the political voice that white communities do and are unable to stand up to the companies who want to profit off of their land.

The exploitation of indigenous people is something we've all read in history books but this exploitation continues today. Though the Black Mesa mine has since been shut down, there are many other areas in Arizona and surrounding states that have been subjected to similar destruction. Peabody Coal continues to uproot families in favor of making room for more strip mining at the site of the Kayenta mine, which is still in use today. These mines created jobs, but at what cost? Simon Crank, an 80 year old man living in Kayenta has worked in the mine his whole life and now requires tubes for breathing, reflects back when the mines were first introduced, "We were never told. We saw the income coming in, but the hazards – we never knew we were going to experience this."

The impacts on the land are troubling but the struggle and exploitation of Native Americans remains to be the most devastating. It's not just an ecological problem, it's a social, political, and economical one. We can change this and focus on developing cleaner energy resources while protecting the rights of indigenous people here in America. We can't let the corporations win.

For more information, visit Indigenous Environmental Network's website: www.ienearth.org

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